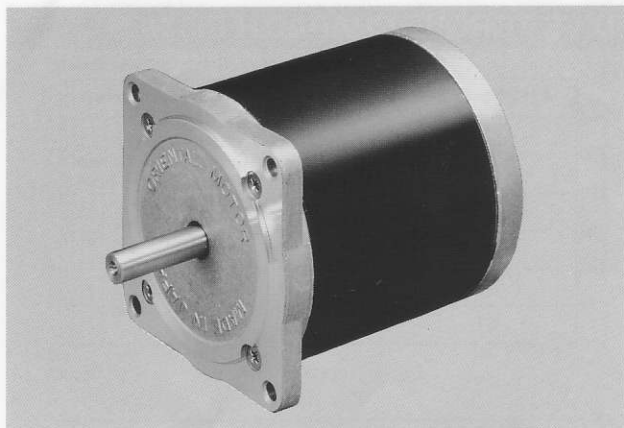


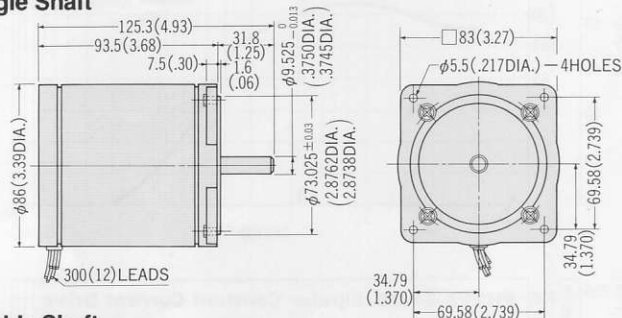
# DC Stepping Motors

## 1.8° STEP ANGLE STANDARD TYPE

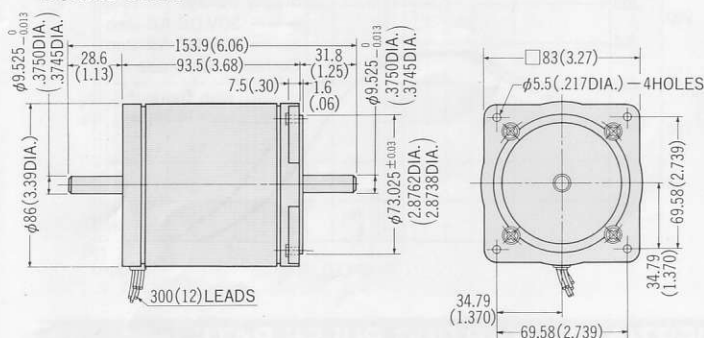


### DIMENSIONS scale 1:4, unit = mm (inch)

#### Single Shaft

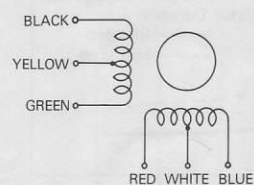


#### Double Shaft

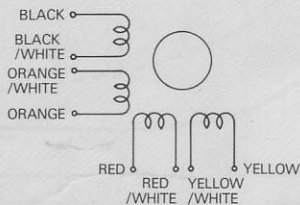


### WINDINGS & LEAD WIRE COLORS

#### 6 leads

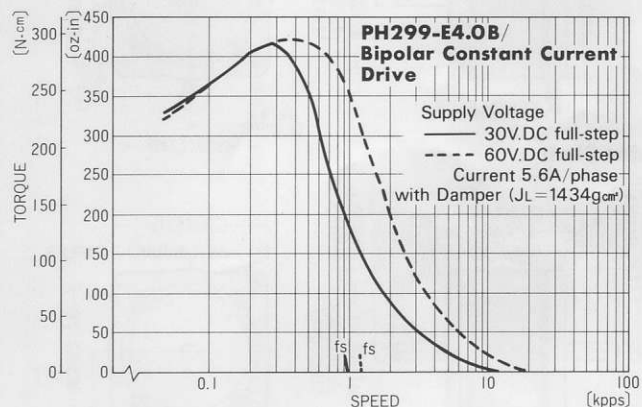
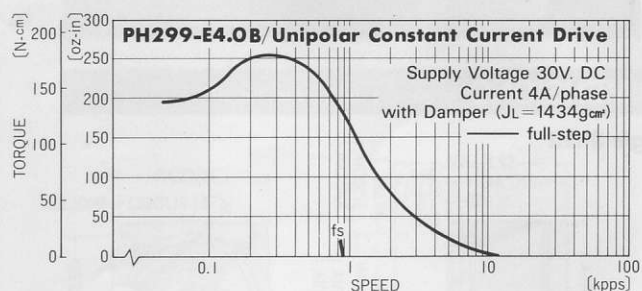
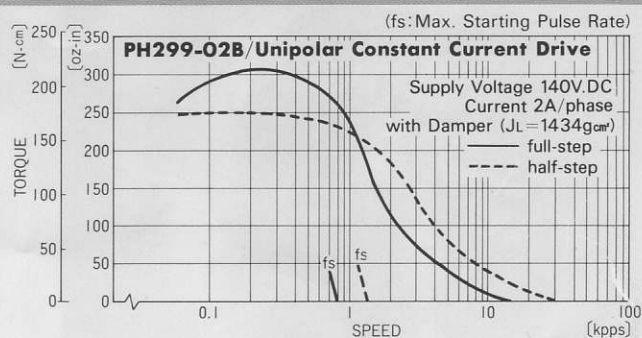


#### 8 leads

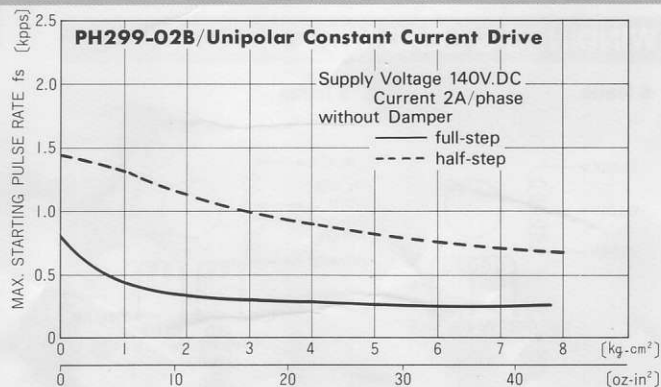


## PH299-□□□

### SPEED VS TORQUE CHARACTERISTICS



### INERTIA VS STARTING PULSE RATE CHARACTERISTICS



### SPECIFICATIONS (2-phase full-step)

Motor type		Voltage V.DC	Current per phase A/phase	Holding Torque		Resistance per phase ohm/phase (winding)	Inductance per phase mH/phase (winding)	Number of Leads
Single Shaft	Double Shaft			OZ-in	N-cm			
PH299-01	PH299-01B	3	4.0	306	216	0.75	4.5	6
PH299-02	PH299-02B	6	2.0	306	216	3	18	6
PH299-03	PH299-03B	12	1.0	306	216	12	72	6
PH299-E4.0	PH299-E4.0B	3	4.0*1 5.6*2	306	216	(0.75)	—	8

● Rotor Inertia 6.0 OZ-in<sup>2</sup> (1,100g-cm<sup>2</sup>) ● Weight 5.5 lbs (2.5kg) \*1: Unipolar \*2: Bipolar